REMARKS

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested. Claims 37, 40, 42, 58, 61, 63, 79, 82, and 84 have been amended. Claims 37-99 are currently pending in the application.

In the Office Action, the Examiner rejected claims 37-39, 44-45, 48, 51, 53-60, 65-66, 69, 72, 74-81, 86-87, 90, 93, and 95-99 under 35 U.S.C. §102(e) as being anticipated by Krueger et al. (U.S. Patent No. 5,996,022). This rejection is respectfully traversed.

Independent Claim 37

Independent method claim 37 has been amended, and as amended now recites:

A method implemented by a server, comprising:
receiving a <u>request from a first client to browse contents of a first file system</u> on a first data server, wherein the first data server implements the first file system for managing file access and storage, and wherein the first client is unaware that the first data server implements the first file system;
<u>selecting a first protocol interpreter from a plurality of different protocol interpreters,</u> wherein the first protocol interpreter implements a first file access protocol which enables interaction with the first file system;
invoking the first protocol interpreter to interact with the first file system of the first data sever to obtain therefrom a first list of contents, <u>wherein the first list of contents sets forth a hierarchical listing of at least a portion of the contents of the first file system on the first data server, the first list of contents comprising one or more directories</u> and zero or more files; and
sending at least a portion of the first list of contents to the first client. (emphasis added)

The method of claim 37 provides an advantageous way for a client to interact with the file system of a data server without being aware of the file system that is implemented on the data server. According to claim 37, this is achieved via a server (referred to in the following discussion as the intermediate server). Specifically, when the intermediate

server receives a request from a client to browse the contents of a file system on a data server, the intermediate server selects a protocol interpreter from a plurality of different protocol interpreters. The selected protocol interpreter implements a file access protocol, which enables the intermediate server to interact with the file system on the data server.

Once the protocol interpreter is selected, the intermediate server invokes the protocol interpreter to interact with the file system on the data server. This interaction enables the intermediate server to obtain from the data server a list of contents. This list of contents sets forth a hierarchical listing of at least a portion of the contents of the file system. This list of contents comprises one or more directories and zero or more files. The intermediate server then provides the list of contents to the client. By doing so, the intermediate server in effect provides the client with a view of a portion of the contents of the file system of the data server, thereby allowing the client to browse the file system. This is achieved without the client even being aware of the file system that is implemented on the data server.

Also, because the intermediate server selects the protocol interpreter from a plurality of different protocol interpreters, the intermediate server can, by selecting the proper protocol interpreters, interact with different data servers implementing different file systems. This in turn means that the client, via the intermediate server, can browse the file system contents of different data servers implementing different file systems. Thus, without even being aware of any file system implemented by any data servers, the client is able to browse the file system contents of a number of different data servers implementing a number of different file systems.

Such a method is neither disclosed nor suggested by Krueger et al. Instead, Krueger et al. discloses a system in which a proxy server couples a set top box (a client)

to a remote server. According to Krueger et al., when the proxy server receives a request from the client for an audio file, the proxy server retrieves that file from the remote server. The proxy server then transcodes the audio file based upon the hardware and software capabilities of the client, and sends the transcoded file to the client. (Col. 2, lines 59-67, Col. 3, lines 1-4) In this manner, the proxy server ensures that the client will be able to render the audio file.

Krueger et al. neither discloses nor suggests the method of claim 37. At least several points should be noted. First, note that unlike claim 37, the proxy server of Krueger et al. does not receive <u>a request to browse the contents of a file system on a data server</u>. Rather, the proxy server of Krueger et al. simply receives from the client <u>a request for a specific audio file</u>. The client in Krueger et al. is not interested in interacting with the file system on the remote server, nor is it interested in browsing the contents of that file system. Instead, it is simply interested in receiving a specific file. Thus, the request received by the proxy server in Krueger et al. is very different from the request received in claim 37. Krueger et al. neither discloses nor suggests receiving a request from a client to browse the contents of a file system on a data server.

Also, note that unlike claim 37, the proxy server of Krueger et al. does not obtain from the remote server <u>a list of contents that sets forth a hierarchical listing of at least a portion of the contents of the file system on the remote server, wherein the list of contents comprises one or more directories</u>. Instead, the proxy server of Krueger et al. simply obtains <u>a specific file</u> from the remote server. This only makes sense; since the request from the client is for a specific file, it should be expected that the proxy server would obtain only that file from the remote server. In support of her contention that this element of claim 37 is disclosed in Krueger et al., the Examiner points to several excerpts

in which the proxy function of the proxy server is discussed. In none of these excerpts, however, is it disclosed or suggested that the proxy server obtain <u>a list of contents of a file system, wherein the list of contents is hierarchical and comprises one or more directories</u>. As far as Applicant can see, this aspect of claim 37 is completely absent from Krueger et al.

Yet another point to note is that unlike claim 37, Krueger et al. neither discloses nor suggests <u>selecting a protocol interpreter from a plurality of different protocol interpreters</u>. From Applicant's reading of Krueger et al., it does not appear that the proxy server of Krueger et al. selects a protocol interpreter at all, much less selecting one from a plurality of different protocol interpreters. The proxy server of Krueger et al. is not concerned with interacting with different remote servers implementing different file systems. Thus, it is not surprising that the proxy server does not select a protocol interpreter from a plurality of different protocol interpreters. In support of her contention that this element of claim 37 is disclosed in Krueger et al., the Examiner again points to several excerpts in which the proxy function of the proxy server is discussed. However, none of these excerpts disclose or suggest the proxy server selecting a protocol interpreter from a plurality of different protocol interpreters. Consequently, Applicant respectfully submits that this aspect of claim 37 is missing from Krueger et al.

Because Krueger et al. fails to disclose or suggest at least the elements discussed above, Applicant respectfully submits that claim 37 is patentable over Krueger et al.

Applicant further submits that dependent claims 38-39, 44-45, 48, 51, and 53-57, which depend from claim 37 and which recite further patentable aspects of the invention, are likewise patentable over Krueger et al. for at least the same reasons as those given above in connection with claim 37.

Independent Claim 58

Claim 58 is an apparatus claim analogous to the method claim of claim 37. Applicant submits that claim 58 is patentable over Krueger et al. for at least the same reasons as those given above in connection with claim 37.

Applicant further submits that dependent claims 59-60, 65-66, 69, 72, and 74-78, which depend from claim 58 and which recite further patentable aspects of the invention, are likewise patentable over Krueger et al. for at least the same reasons as those given above in connection with claim 58.

Independent Claim 79

Claim 79 is a computer readable medium claim analogous to the method claim of claim 37. Applicant submits that claim 79 is patentable over Krueger et al. for at least the same reasons as those given above in connection with claim 37.

Applicant further submits that dependent claims 80-81, 86-87, 90, 93, and 95-99, which depend from claim 79 and which recite further patentable aspects of the invention, are likewise patentable over Krueger et al. for at least the same reasons as those given above in connection with claim 79.

In the Office Action, the Examiner rejected claims 40-43, 61-64, and 82-85 under 35 U.S.C. §103(a) as being unpatentable over Krueger et al. in view of Stollfus et al. (U.S. Patent No. 6,321,258). This rejection is respectfully traversed.

Dependent Claims 40-43

Claims 40-43 depend from claim 37 and hence incorporate all of the limitations of claim 37. If claim 37 is shown to be patentable over the applied art, then it follows that claims 40-43 are likewise patentable over the applied art.

As argued previously, claim 37 is patentable over Krueger et al., taken as an individual reference. Claim 37 is also patentable over Stollfus et al., taken as an individual reference. Stollfus et al. suffers from at least the same shortcomings as Krueger et al. Specifically, Stollfus et al. does not disclose or suggest a server receiving a request from a client to browse the contents of a file system on a data server. Also, Stollfus et al. does not disclose or suggest a server obtaining from a data server a list of contents that sets forth a hierarchical listing of at least a portion of the contents of the file system on the data server, wherein the list of contents comprises one or more directories. Furthermore, Stollfus et al. fails to disclose or suggest a server selecting a protocol interpreter from a plurality of different protocol interpreters. Because Stollfus et al. fails to disclose or suggest at least these aspects of claim 37, Applicant submits that claim 37 is patentable over Stollfus et al., taken as an individual reference.

Even combined (assuming for the sake of argument that it would have been obvious to combine), these references would still not give rise to the invention as claimed in claim 37. As argued, neither reference discloses or suggests the elements noted above. Thus, even if the references were combined, they still would not produce the method of claim 37. Accordingly, Applicant respectfully submits that claim 37 is patentable over Krueger et al. and Stollfus et al., taken individually or in combination.

Applicant further submits that dependent claims 40-43, which depend from claim 37 and which recite further patentable aspects of the invention, are likewise patentable

over Krueger et al. and Stollfus et al. for at least the same reasons as those given above in connection with claim 37.

Dependent Claims 61-64

Claims 61-64 depend from claim 58 and hence incorporate all of the limitations of claim 58. If claim 58 is shown to be patentable over the applied art, then it follows that claims 61-64 are likewise patentable over the applied art.

Claim 58 is an apparatus claim analogous to the method claim of claim 37. Applicant submits that claim 58 is patentable over Krueger et al. and Stollfus et al. for at least the same reasons as those given above in connection with claim 37.

Applicant further submits that dependent claims 61-64, which depend from claim 58 and which recite further patentable aspects of the invention, are likewise patentable over Krueger et al. and Stollfus et al. for at least the same reasons as those given above in connection with claim 58.

Dependent Claims 82-85

Claims 82-85 depend from claim 79 and hence incorporate all of the limitations of claim 79. If claim 79 is shown to be patentable over the applied art, then it follows that claims 82-85 are likewise patentable over the applied art.

Claim 79 is a computer readable medium claim analogous to the method claim of claim 37. Applicant submits that claim 79 is patentable over Krueger et al. and Stollfus et al. for at least the same reasons as those given above in connection with claim 37.

Applicant further submits that dependent claims 82-85, which depend from claim 79 and which recite further patentable aspects of the invention, are likewise patentable

over Krueger et al. and Stollfus et al. for at least the same reasons as those given above in connection with claim 79.

In the Office Action, the Examiner rejected claims 46-47, 49-50, 52, 67-68, 70-71, 73, 88-89, 91-92, and 94 under 35 U.S.C. §103(a) as being unpatentable over Krueger et al. in view of Busey et al. (U.S. Patent No. 5,764,916). This rejection is respectfully traversed.

Dependent Claims 46-47, 49-50, and 52

Claims 46-47, 49-50, and 52 depend from claim 37 and hence incorporate all of the limitations of claim 37. If claim 37 is shown to be patentable over the applied art, then it follows that claims 46-47, 49-50, and 52 are likewise patentable over the applied art.

As argued previously, claim 37 is patentable over Krueger et al., taken as an individual reference. Claim 37 is also patentable over Busey et al., taken as an individual reference. Busey et al. suffers from at least the same shortcomings as Krueger et al. Specifically, Busey et al. does not disclose or suggest a server receiving a request from a client to browse the contents of a file system on a data server. Also, Busey et al. does not disclose or suggest a server obtaining from a data server a list of contents that sets forth a hierarchical listing of at least a portion of the contents of the file system on the data server, wherein the list of contents comprises one or more directories. Furthermore, Busey et al. fails to disclose or suggest a server selecting a protocol interpreter from a plurality of different protocol interpreters. Because Busey et al. fails to disclose or

suggest at least these aspects of claim 37, Applicant submits that claim 37 is patentable over Busey et al., taken as an individual reference.

Even combined (assuming for the sake of argument that it would have been obvious to combine), these references would still not give rise to the invention as claimed in claim 37. As argued, neither reference discloses or suggests the elements noted above. Thus, even if the references were combined, they still would not produce the method of claim 37. Accordingly, Applicant respectfully submits that claim 37 is patentable over Krueger et al. and Busey et al., taken individually or in combination.

Applicant further submits that dependent claims 46-47, 49-50, and 52, which depend from claim 37 and which recite further patentable aspects of the invention, are likewise patentable over Krueger et al. and Busey et al. for at least the same reasons as those given above in connection with claim 37.

Dependent Claims 67-68, 70-71, and 73

Claims 67-68, 70-71, and 73 depend from claim 58 and hence incorporate all of the limitations of claim 58. If claim 58 is shown to be patentable over the applied art, then it follows that claims 67-68, 70-71, and 73 are likewise patentable over the applied art.

Claim 58 is an apparatus claim analogous to the method claim of claim 37. Applicant submits that claim 58 is patentable over Krueger et al. and Busey et al. for at least the same reasons as those given above in connection with claim 37.

Applicant further submits that dependent claims 67-68, 70-71, and 73, which depend from claim 58 and which recite further patentable aspects of the invention, are

likewise patentable over Krueger et al. and Busey et al. for at least the same reasons as those given above in connection with claim 58.

Dependent Claims 88-89, 91-92, and 94

Claims 88-89, 91-92, and 94 depend from claim 79 and hence incorporate all of the limitations of claim 79. If claim 79 is shown to be patentable over the applied art, then it follows that claims 88-89, 91-92, and 94 are likewise patentable over the applied art.

Claim 79 is a computer readable medium claim analogous to the method claim of claim 37. Applicant submits that claim 79 is patentable over Krueger et al. and Busey et al. for at least the same reasons as those given above in connection with claim 37.
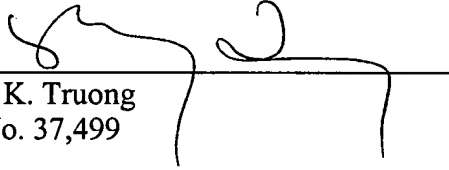
Applicant further submits that dependent claims 88-89, 91-92, and 94, which depend from claim 79 and which recite further patentable aspects of the invention, are likewise patentable over Krueger et al. and Busey et al. for at least the same reasons as those given above in connection with claim 79.

For the reasons set forth above, Applicant respectfully submits that claims 37-99

are patentable over the art of record, including the art cited and not applied. Accordingly,

allowance of all pending claims is respectfully solicited.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

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Bobby K. Truong
Reg. No. 37,499

1600 Willow Street
San Jose, California 95125-5106
Telephone No.: (408) 414-1080
Facsimile No.: (408) 414-1076